

# Blue Ridge goldenrod

## *Solidago spithamea*



Blue ridge goldenrod, USFWS

### Status: Threatened

**Description:** Blue Ridge goldenrod is a small perennial herb (4 to 8 inches tall). Its golden-yellow flowers appear from late July to September; and fruits form and ripen from July to October. Although there are many species of goldenrods, this one can be distinguished by its flat-topped flowers, small stature, smooth foliage, and toothed, non-clasping stem leaves.

**Habitat:** This species occupies rock outcrops, ledges, and cliffs at high elevations (generally above 4,600 ft.). The soils upon which this species grows are generally shallow and acidic. Blue Ridge goldenrods usually grow in full sun.

**Range:** Blue Ridge goldenrod is only known from Avery County, NC, and the border area between Mitchell County, NC and Carter County, TN.

**Listing:** Threatened, March 28, 1985, Federal Register 50:12306-120309.

**Critical Habitat:** None designated

### Threats:

Confined to small areas on a few rocky summits in the Blue Ridge Mountains, this species and many of its rare associates are extremely vulnerable to such seemingly minor threats as trampling by hikers, climbers, and sightseers; as well as to more pervasive threats such as acid precipitation and other forms of air pollution which have been found to be concentrated at the higher elevations in the Southern Appalachians.

An exotic insect, the balsam woolly adelgid, is contributing to the decline of the fir forests adjacent to some of the cliffs where Blue Ridge goldenrod grows. Although the goldenrod does not grow beneath dense forests, the death of the adjacent forests is resulting in drier and hotter conditions. All of these factors may threaten the last remaining populations of Blue Ridge goldenrod.

Growing at some of the highest elevations in the Southern Appalachians, where the climate is significantly colder and weather harsher than surrounding areas, it's

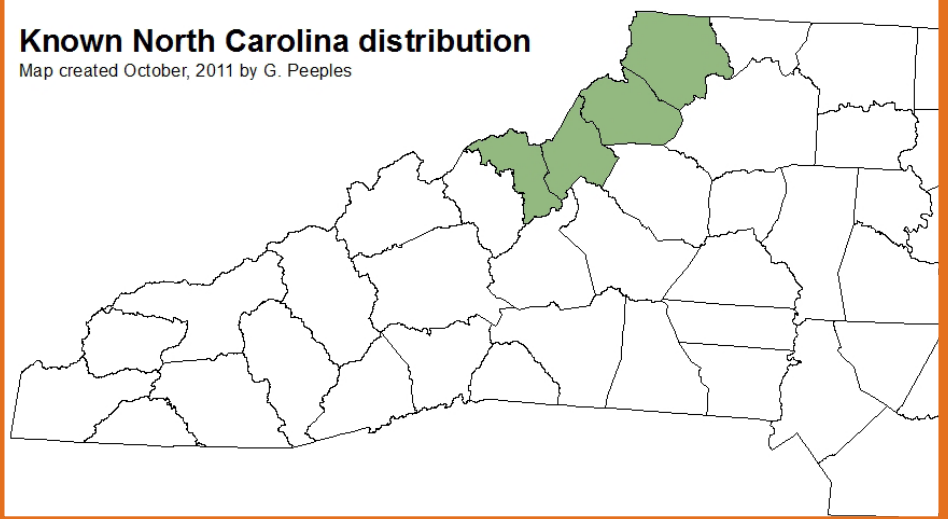
suspected that global warming may be detrimental to this plant as well.

**Why should we be concerned about the loss of species?** Extinction is a natural process that has been occurring since long before the appearance of humans. Normally new species develop through a process known as speciation, at about the same rate other species become extinct. However, because of air and water pollution, forest clearing, loss of wetlands, and other man-induced environmental changes, extinctions are now occurring at a rate that far exceeds the speciation rate.

All living things are part of a complex and interconnected network. We depend on the diversity of plant and animal life for our recreation, nourishment, many of our lifesaving medicines, and the ecological functions they provide. One-quarter of all the prescriptions written in the United States today contain chemicals that were originally discovered in plants and animals. Industry and agriculture are increasingly making use of wild plants, seeking out the remaining wild strain of many common crops, such as wheat and corn, to produce new hybrids that are more resistant to disease, pests, and marginal climatic conditions. Our food crops depend on insects and other

### Known North Carolina distribution

Map created October, 2011 by G. Peebles



## U.S. Fish & Wildlife Service

animals for pollination. Healthy forests clean the air and provide oxygen for us to breathe. Wetlands clean water and help minimize the impacts of floods. These services are the foundation of life and depend on a diversity of plants and animals working in concert. Each time a species disappears, we lose not only those benefits we know it provided but other benefits that we have yet to realize.

### **What you can do to help:**

Tread lightly and stay on designated trails. Vegetation on popular high mountains has virtually been destroyed by human trampling.

Visit arboretums, botanical gardens, and parks and learn all you can about endangered plants and the causes of their declines.

Don't collect or buy plants collected from wild populations.

Participate in the protection of our remaining wild lands and the restoration of damaged ecosystems.

Be careful with the use and disposal of pesticides and other chemicals, especially near sensitive habitat. Wetlands are particularly valuable habitats for many rare plants and animals; be careful not to alter their hydrology or allow polluting chemicals to drain into them.

Recycle as much as you can. As landfills become full, new ones are often placed in undeveloped areas, causing the destruction of hundreds of acres of wild habitat.

### **Prepared by:**

**U.S. Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, North Carolina 28801  
(828) 258 3939**

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